

REMARKS

This is in response to the Office Action of 20 April 2005. Claims 3, 15-17 and 19-20 are pending in the application, and Claims 3, 15-17 and 19-20 have been rejected.

By this Response and Amendment, independent Claims 3 and 15 have been amended, new dependent Claims 21-26 have been added, and arguments traversing the rejection of Claims 19-20 are presented.

No new matter has been added.

In view of the amendments above and the remarks below, Applicant respectfully requests reconsideration and further examination.

About the Invention

The present invention relates generally to methods of assembling connectors suitable for use with coaxial wiring, twinaxial wiring, and combinations thereof. Connectors in accordance with the present invention can be assembled such that they are a desired height, or thickness.

Rejections under 35 USC §102(b)

Claim 3 has been rejected 35 USC §102(b) as being anticipated by Boggs (US Patent 4,935,584).

Boggs discloses a method of fabricating a printed circuit board. More particularly, Boggs discloses that a circuit board is fabricated from first and second composite sheets, each composed of a substrate of dielectric material and at least one conductor run adhered to the substrate. The substrate of the second composite sheet is formed with a through-hole adjacent to the conductor run of that sheet. The second composite sheet is adhered to the first composite sheet, with the conductor run of the first sheet exposed through the hole in the second sheet. Conductive material is

introduced into the hole and provides an electrically conductive connection between the conductor runs of the two sheets.

Boggs does not disclose disposing coax or twinax wiring into through-holes. As described in Applicant's specification, coax and twinax include a layer of dielectric material surrounding the conductors. A consequence of disposing such wiring types into through-holes, in accordance with the claimed invention, is that the signal conductors are physically spaced apart from inner surfaces of the through-holes. This is different from the disclosure of Boggs in which the through-hole is filled with a conductor, and therefore the signal conductor of Boggs is in physical contact with the inner surfaces of the through-holes.

Independent Claim 3 has been amended to further recite disposing a conductor that is surrounded by a dielectric layer into at least one of the plurality of through-holes. Boggs does not disclose, suggest or provide motivation for limitations found in amended Claim 3.

For at least the foregoing reasons, Applicant respectfully submits that the rejection of Claim 3 has been overcome.

Rejections under 35 USC §103(a)

Claims 15-17 and 19-20 have been rejected under 35 USC §103(a) as being unpatentable over Boggs (US Patent 4,935,584).

Independent Claim 15 has been amended to further recite disposing a conductor that is surrounded by a dielectric layer into at least one of the plurality of through-holes. Boggs does not disclose, suggest or provide motivation for the limitations found in amended Claim 15.

For at least the foregoing reasons, Applicant respectfully submits that the rejection of Claim 15 has been overcome. Applicant further submits that the rejection of Claims 16-17 which depend from amended independent Claim 15 has also been overcome.

With respect to Claims 19-20, Applicant respectfully traverses the rejection of these Claims and requests that they be withdrawn.

Applicant notes that independent Claim 19 recites disposing a conductive sheet between a pair of the plurality of stacked connector slices. In this way, a common ground can be formed between the coax ground shields that are to be disposed in the through-holes. Boggs discloses a substrate with a conductive trace and a through-hole in an overlying board for making a connection between traces on different levels. Boggs does not disclose, suggest or provide motivation for disposing a conductive sheet as recited by Applicant.

Claim 20, which depends from Claim 19, further recites inserting a conductor with a dielectric coating into a conductively coated through-hole. Boggs does not disclose, suggest, or provide motivation for inserting a conductor with a dielectric coating into a through-hole.

In view of the foregoing, Applicant respectfully submits that the rejections under 35 USC §103(a) of Claims 19-20 are improper and should be withdrawn.

New Claims 21-26

New Claims 21-23 depend from amended independent Claim 3, and are directed to specific characteristics of the conductors that are disposed in the through-holes. New Claims 24-26 depend from amended independent Claim 15, and are directed to specific characteristics of the conductors that are disposed in the through-holes.

Conclusion

All of the rejections in the outstanding Office Action of 20 April 2005 have been responded to, and Applicant respectfully submits that the pending Claims 3, 15-17, and 19-26 are now in condition for allowance.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

By 

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Hillsboro, Oregon

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